

CLAIMS

We claim:

1. A combination device for printing information on each bag of a continuous strip of bags and positioning the bag for loading with a product, the device comprising:

5 a support frame including a feed assembly for feeding the continuous strip of bags;

a printer assembly positioned on the support frame to receive the continuous strip of bags, the printer assembly including a print head operable to print selected information on each individual bag as the bag moves through the printer assembly; and

10 a loading assembly positioned on the support frame to receive the continuous strip of bags after the continuous strip of bags pass through the printer assembly, the loading assembly being operable to open each individual bag of the continuous strip to allow loading of the product into the bag;

15 wherein the loading assembly is positioned adjacent to the printer assembly such that the loading assembly opens the individual bag for loading immediately after the bag has been printed by the printer assembly such that no printed bags are positioned between the bag being loaded and the printer assembly.

2. The combination device of claim 1 wherein the loading assembly includes a drive roller and a pinch roller that receive the continuous strip of bags therebetween, the drive roller being operable to advance the strip of bags from the printer assembly.

3. The combination device of claim 2 wherein the printer assembly includes a drive roller positioned beneath the print head, wherein the drive roller is operated independently from the drive roller of the loading assembly to advance the continuous strip of bags from the feed assembly during printing.

4. The combination device of claim 1 wherein the printer assembly is movable relative to the loading assembly such that the distance between the printing head and the loading assembly can be adjusted to compensate for the length of the individual bags of the continuous strip of bags.

5. The combination device of claim 4 wherein the printer assembly is mounted between a pair of guide rails such that the printer assembly is movable toward and away from the loading assembly along the guide rails.

6. A method of printing information on individual bags of a continuous strip of bags and loading a product into each bag, the method comprising the steps of:

5 positioning a printer assembly to receive the continuous strip of bags;
 printing information on each individual bag of the continuous strip;
 transferring the bag to a loading assembly after the bag has been
printed; and

 opening the bag in the loading assembly for loading with a product
before another bag is printed, such that no printed bags are positioned between the
10 printer assembly and the loading assembly.

7. The method of claim 6 further comprising the step of adjusting the distance between the printer assembly and the loading assembly based upon the length of each individual bag.

8. The method of claim 7 wherein the step of adjusting the distance includes moving the printer assembly relative to the loading assembly.

9. The method of claim 6 wherein both the printer assembly and the loading assembly include drive rollers, wherein the drive roller of the printer assembly is independently operable from the drive roller of the loading assembly.

10. The method of claim 6 wherein the step of printing information on each individual bag includes the step of selecting specific information to be printed on each individual bag.